REMARKS

The Office Action of January 30, 2008 has been received and carefully reviewed. It is submitted that, by this Response, all bases of rejection are traversed and overcome. Upon entry of this Amendment, claims 12-19, 21-38 and 45-57 remain in the application. Reconsideration of the claims is respectfully requested.

Claims 12-18, 20-29, 33-34 and 36-37 stand rejected under 35 U.S.C. § 103(a) as being obvious over Gidaspow et al. (U.S. Patent No. 3,823,038) in view of Nakanishi et al. (U.S. Patent No. 6,475,655). Claims 19, 35, 38 and 47 stand rejected under 35 U.S.C. § 103(a) as being obvious over Gidaspow in view of Nakanishi, and further in view of Adams et al. (U.S. Patent Pub. No. 2005/0118468). Claims 30-32 stand rejected under 35 U.S.C. § 103(a) as being obvious over Gidaspow in view of Nakanishi, and further in view of Hockaday (U.S. Patent Pub. No. 2002/0182459).

Regarding claims 12-15, 20, 23 and 28, the Examiner states that Gidaspow teaches a needle that is adapted to receive a housing that includes a first chamber that contains fuel, and a second chamber adapted to receive gaseous fuel. The Examiner also states that the second chamber is separated by a septum adapted to receive the needle. The Examiner admits that Gidaspow does not expressly disclose a catalyst material coated on the second distal end of the needle, but suggests that Nakanishi teaches that it is well known in the art to employ a palladium bleed tube to charge hydrogen to a fuel cell. Furthermore, the Examiner states that Gidaspow and Nakanishi teach a catalyst coated needle, but admits that Gidaspow does not expressly disclose adapting the fuel cell to recharge a battery. The Examiner suggests that Adams teaches that it is well known in the art to employ batteries as a backup power supply for fuel cells. Still further, the Examiner states that Gidaspow and Nakanishi teach a fuel cell including a needled catalyst coated bleed tube, and that Hockaday teaches that it is well known in the art to employ hydrogen fuel as an aqueous solution of sodium borohydride suspended in foam material.

The Applicants strongly disagree that Gidaspow teaches a fuel cartridge that includes a housing with a first chamber that contains fuel, a second chamber adapted to receive gaseous fuel, a septum separating the chambers, and a septum covering an open end of the housing.

In the current Office Action, the Examiner states that the needle (shown in Fig. 1 of Gidaspow, reproduced hereinbelow) is adapted to receive a fuel cartridge including a housing with two chambers, one of which contains fuel and the other of which receives gaseous fuel. The Examiner further states that a cartridge is a container capable of holding fuel, and that any container with such capabilities satisfies the cartridge limitation of the Applicants' claims (see page 4 of the Office Action dated January 30, 2008). Furthermore, the Examiner specifically mentions that Gidaspow's fuel cartridge is illustrated in Figs. 3A and 3B (reproduced hereinbelow).

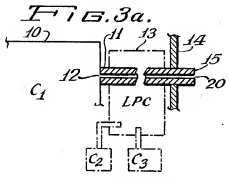

Fig. 3A of U.S. Patent No. 3,823,038

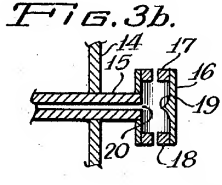

Fig. 3B of U.S. Patent No. 3,823,038

First, Applicants take issue with the Examiner's contention that *any container* that is capable of holding fuel satisfies Applicants' claims. Applicants specifically recite that the fuel cartridge includes an enclosed housing with two chambers separated by a septum, and an additional septum covering the open end of the housing. As such, it is submitted that *any container* would **NOT** satisfy such claim

limitations, unless the container included the housing, chambers and septums as recited by the Applicants.

It is submitted that Gidaspow's alleged fuel cartridge at least does not include a septum separating the chambers or a septum covering the open end. Such septums are neither shown in the Figures relied upon by the Examiner, nor are they discussed in the text of Gidaspow. In fact, the opening **20** of Gidaspow's bleed tube is not covered, and this fact is recognized by the Examiner when she states, "the tube of Gidaspow is open on both ends..." (see page 7 of the Office Action).

Second, the Examiner asserts that "it would be reasonable to expect that gas may enter and exit the tube" of Gidaspow. Applicants respectfully disagree. The fuel cell of Gidaspow includes a reactant gas input **1** (shown in Fig. 1, below), and a **separate** continuous bleed tube at the end opposite the reactant gas input end. If the bleed tube of Gidaspow were used for the introduction of reactant gas, as suggested by the Examiner, the fuel cell would have two fuel inlets and the *stated purpose* of the bleed tube (i.e., to deliver continuous bleed of gas from the cell (see Col. 9, lines 63-72) and to obtain a steady state concentration curve distribution (see Col. 7, lines 67-70)) *would be destroyed*.

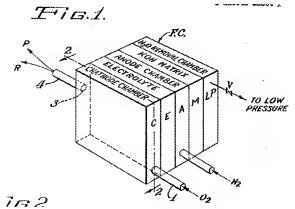

Fig. 1 of U.S. Patent No. 3,823,038

Still further, Applicants' needle is adapted to enter the fuel cartridge (see Applicants' Fig. 1, reproduced hereinbelow). As such, the fuel cartridge is separate from the fuel cell, and is used to supply fuel to recharge the fuel cell.

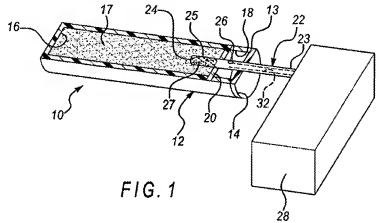

FIG. 1

Applicants' Fig. 1

Contrary to the Examiner's assertions, Gidaspow neither teaches nor suggests a fuel cartridge that receives a needle of a fuel cell.

Assuming *arguendo* that the Examiner's interpretation of Gidaspow is accurate, this interpretation still does not teach or suggest the needle and fuel cartridge recited in Applicants' claims. The Examiner states that the fuel cell in Fig. 1 of Gidaspow includes the needle **1**, and that the fuel cell in Figs. 3A and 3B is a fuel cartridge. The fuel cell in Figs. 3A and 3B illustrates the continuous bleed apparatus of a fuel cell, such as the fuel cell of Fig. 1. As such, the Examiner's conclusion is that the fuel cell of Gidaspow is a fuel cartridge that includes a needle, NOT a fuel cell having a needle that enters a fuel cartridge.

The Applicants further submit that none of the secondary references (i.e., Nakanishi, Adams or Hockaday) supply the deficiencies of Gidaspow as outlined above.

For all the reasons stated above, it is submitted that Applicants' invention as defined in independent claims 12, 45 and 47, and in those claims depending ultimately therefrom, is not anticipated, taught or rendered obvious by the Gidaspow, Nakanishi, Adams and Hockaday references, either alone or in any combination, and patentably defines over the art of record.

In summary, claims 12-19, 21-38 and 45-47 remain in the application. It is submitted that, through this Amendment, Applicants' invention as set forth in these claims is now in a condition suitable for allowance. Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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Dated: April 30, 2008
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